

Application No. 10/743,806
Attorney Docket No.: 032148
Amendment Under 37 C.F.R. § 1.111

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1. (Currently Amended): A field-sequential type display device for performing a display by synchronizing successive switching of lights of a plurality of colors to be incident on a display element with light control in said display element based on display data of each color corresponding to an image to be displayed, comprising:
a detecting unit for detecting a grayscale level of the display data for each color; and
an adjusting unit for adjusting, ~~individually~~ independently for each color, an intensity of light incident on said display element and a light control variable in said display element, based on ~~the respective grayscale level of each color detected in a detection result for each of said~~ detecting unit.

2. (Cancelled)

3. (Original): The display device of claim 1, wherein
said detecting unit detects a grayscale level of maximum brightness of the display data in a predetermined period, and, when obtaining the maximum brightness, said adjusting unit adjusts the light control variable in said display element so as to have maximum transmittance or reflectance of incident light on said display element and adjusts the intensity of incident light according to the adjusted light control variable.

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4. (Original): The display device of claim 3, wherein
when obtaining brightness of a grayscale level other than the grayscale level of maximum
brightness, said adjusting unit adjusts the light control variable in said display element.

5. (Original): The display device of claim 1, wherein
an intensity of light incident on said display element after adjusting the intensity of light
and the light control variable by said adjusting unit is smaller than an intensity of light incident
on said display element without performing the adjustments.

6. (Original): The display device of claim 1, wherein
an incident region of light to be incident on said display element is divided, and the
detection of a grayscale level by said detecting unit and the adjustments of the intensity of light
and the light control variable by said adjusting unit are performed for each of the incident regions.

7. (Original): The display device of claim 1, wherein
said display element is a liquid crystal display element.

8. (Original): The display device of claim 7, wherein
a liquid crystal material used in said liquid crystal display element has spontaneous
polarization.

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9. (Original): The display device of claim 1, wherein
said display element is a digital micro mirror device.

10. (Original): The display device of claim 1, wherein
the lights of a plurality of colors to be incident on said display element are red light,
green light, and blue light.

11. (Original): The display device of claim 1, wherein
the lights of a plurality of colors to be incident on said display element are red light,
green light, blue light, and white light.

12. (Original): The display device of claim 11, further comprising a converting unit for
converting red, green and blue display data into red, green, blue and white display data,
wherein said detecting unit detects grayscale levels of display data obtained by said
converting unit.

13. (Currently Amended): A display device for performing a color display by
synchronizing incidence of white light on a display element having color filters of a plurality of
colors with light control in said display element based on display data of each color
corresponding to an image to be displayed, comprising:
a detecting unit for detecting a grayscale level of the display data for each color; and

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an adjusting unit for adjusting, individually independently for each color, an intensity of white light incident on said display element and a light control variable in said display element, based on the respective grayscale level of each color detected in a detection result of said detecting unit.

14. (Currently Amended): A display method for performing a field-sequential type display by synchronizing successive switching of lights of a plurality of colors to be incident on a display element with light control in said display element based on display data of each color corresponding to an image to be displayed, comprising:

detecting a grayscale level of the display data for each color; and
adjusting, individually independently for each color, an intensity of light incident on said display element and a light control variable in said display element, based on the respective a detection result of the grayscale level of each color respectively.

15. (Currently Amended): A display method for performing a color display by synchronizing incidence of white light on a display element having color filters of a plurality of colors with light control in said display element based on display data of each color corresponding to an image to be displayed, comprising:

detecting a grayscale level of the display data for each color; and

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adjusting, individually independently for each color, an intensity of white light incident on said display element and a light control variable in said display element, based on the respective a-detection result of the grayscale level of each color respectively.